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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,970	11/21/2006	Jonathan Edward Creeth	CB60508	4572
20462	7590	07/28/2010	EXAMINER	
GlaxoSmithKline			MAEWALL, SNIGDHA	
GLOBAL PATENTS -US, UW2220				
P. O. BOX 1539			ART UNIT	PAPER NUMBER
KING OF PRUSSIA, PA 19406-0939			1612	
			NOTIFICATION DATE	DELIVERY MODE
			07/28/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

US\_cipkop@gsk.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/572,970	CREETH, JONATHAN EDWARD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Snigdha Maewall	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 June 2007.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 and 11-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1 and 11-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>03/21/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

**JP 01237700 (of record) used in the previous office action was inadvertently spelled as EP 01237700. Accordingly, the previous office action is hereby vacated and a new office action is issued herein.**

### Summary

1. Receipt of IDS filed on 03/21/06 is acknowledged.

Claims **1 and 11-20** are pending. Claims **2-10** have been cancelled.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations in parenthesis which makes the claim indefinite because it is not clear whether the limitations are really the limitations or not. The term control does not define specifics; it is not clear what constitutes control. The term thus makes the claim indefinite. Claim 18 recites the limitation SLS, examiner suggests

reciting full name for the abbreviation because it is not clear what applicants mean by SLS. Claim 19 recites the limitation treating natural teeth. The nature of treatment is unclear in the claim. Claim 11 recites the limitation as further comprising abrasive silica and claim 1 recites abrasive. It is not clear whether the abrasive claimed in claim 1 is silica abrasive same as claim 1 or different from abrasive claimed in claim1. Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 12-15, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by EP A 0002184, translation attached.

EP teaches use of sodium polyphosphate in fine granulate for tooth cleaning either by itself or in combination with commercial tooth paste formulation referring to

abrasive effect of sodium polyphosphate and intensify action of tooth cleaning without damaging the substance of teeth. The reference teaches calcium sequestering agent from 2 to 5% on page 1 of translation and the whole translation. The reference does not teach silica abrasive. Property of the dentifrice composition will be inherent to the composition since all required components are disclosed by prior art. Regarding claim 18, patent office is not equipped with laboratory to test the property of the composition, since the claimed components are present in prior art, it is the position of the Examiner that the claimed property will be associated with the composition. Regarding claims 19-20, intended use of a dental composition does not hold patentable weight wherein the claims are drawn to a dentifrice composition.(Instant specification on page 3 discloses merits of EP0002184).

6. Claims 1, 12,-15 and 18-20 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 01237700 (application no.), presented in IDS.

JP teaches dentifrice composition comprising 0.1% to 50% of calcium chelating/sequestering compound such as sodium tripolyphosphates, see abstract. The claimed property of RDA and IVSR will be inherent tot the composition since the composition comprises the claimed chelating agent in the claimed range. Regarding claim 18, patent office is not equipped with laboratory to test the property of the composition, since the claimed components are present in prior art, it is the position of the Examiner that the claimed property will be associated with the composition.

Regarding claims 19-20, intended use of a dental composition does not hold patentable weight wherein the claims are drawn to a dentifrice composition.

7. Claims 1, 12-15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner (USP 4,996,042).

Wagner discloses calcium sequestering agent tetrasodium pyrophosphate and mixtures thereof in an amount of 1 to 5% by weight in a tooth paste composition, see column 1, lines 64-68 and column 2, lines 1-4. The reference does not teach abrasive. The claimed property of the composition will be inherent to the composition because the reference teaches the claimed calcium sequestering agent in a tooth paste. Regarding claim 18, patent office is not equipped with laboratory to test the property of the composition, since the claimed components are present in prior art, it is the position of the Examiner that the claimed property will be associated with the composition.

Regarding claims 19-20, intended use of a dental composition does not hold patentable weight wherein the claims are drawn to a dentifrice composition.

8. Claims 1, 11-16, 18 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kostinko et al. (US PG Pub 2003/0133882 A1).

Kostinko teaches abrasive composition for clear tooth paste, see title. The reference teaches using pentasodium tripolyphosphate and sodium polymetaphosphate and tetra sodium pyrophosphate, see paragraph [0040]. Abrasive silica is disclosed in examples, the dentifrice comprises abrasive silica in the range of 0.01% wt to 35 wt %

and RDA of greater than about 50, a has value of less than about 50 and viscosity of greater than about 425,000cps, see page 1, paragraph [0010]. The dentifrice also includes premix with no silica in one of the embodiments, see paragraph [0010]. The dentifrice composition has thickening agents, binders, humectants sweeteners etc. see paragraph [0034]. Paragraph [0035] discloses sorbitol, glycerin etc. Tables III and IV show tetrasodium pyrophosphate in various amounts. Regarding claim 18, patent office is not equipped with laboratory to test the property of the composition, since the claimed components are present in prior art, it is the position of the Examiner that the claimed property will be associated with the composition. Regarding claims 19-20, intended use of a dental composition does not hold patentable weight wherein the claims are drawn to a dentifrice composition.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP A 0002184 in view of Kostinko et al. (US PG Pub 2003/0133882 A1).

EP as discussed above does not teach pentasodium tripyrophosphate as chelating agent used in composition.

Kostinko teaches abrasive composition for clear tooth paste, title. The reference teaches using pentasodium tripolyphosphate and sodium polymetaphosphate and tetra sodium pyrophosphate, see paragraph [0040].

It would have been obvious to one of ordinary skill to substitute pentasodium tripolyphosphate in the teachings of EP reference because substitution of one chelating agent with another would produce predictable results absent evidence to contrary. From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

11. Claims 1, 12-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 01237700 (application no.), presented in IDS.

JP teaches the overlapping range of the chelating agent sodium tripolyphosphates, thus providing case of obviousness as the prior art does not disclose the exact claimed values, but does overlap: in such instances even a slight overlap in range establishes a *prima facie* case of obviousness. In re Peterson, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003). EP teaches dentifrice composition comprising 0.1% to 50% of calcium chelating/sequestering compound such as sodium tripolyphosphates, see abstract. Thus overlapping range provides the reference to be obvious to one of ordinary skill in the art at the time of instant invention.

12. Claims 1, 12-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP A 0002184.

EP teaches use of sodium polyphosphate in fine granulate for tooth cleaning either by itself or in combination with commercial tooth paste formulation referring to abrasive effect of sodium polyphosphate and intensify action of tooth cleaning without damaging the substance of teeth. The reference teaches calcium sequestering agent from 2 to 5% on page 1 of translation. The reference does not teach silica abrasive. Property of the dentifrice composition will be inherent to the composition since all required components are disclosed by prior art. Regarding claims 19-20, intended use of a dental composition does not hold patentable weight wherein the claims are drawn to a dentifrice composition. EP teaches the overlapping range of the chelating agent thus providing case of obviousness as the prior art does not disclose the exact claimed values, but does overlap: in such instances even a slight overlap in range establishes a *prima facie* case of obviousness. In re Peterson, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Snigdha Maewall whose telephone number is (571)-272-6197. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-0580. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Snigdha Maewall/

Examiner, Art Unit 1612

/Gollamudi S Kishore/

Primary Examiner, Art Unit 1612